

10
Claims

What is claimed is:

5 1. A method of manufacturing a luminescent screen assembly on a faceplate panel of a color cathode-ray tube, comprising:

applying an organic conductive layer on the faceplate panel;

applying an organic photoconductive layer on the organic conductive layer;

10 charging the organic photoconductive layer to a desired voltage, thereby

giving the organic photoconductive layer a surface charge of one polarity;

sequentially discharging selected portions of the charged organic photoconductive layer; and

15 affixing a color-emitting phosphor having a charge of the opposite polarity as that

of the organic photoconductive layer onto the charged portions of the organic photoconductive layer after each discharging step.

20 2. The method of claim 1 wherein the negative voltage is within a range of about
- 200 volts to about - 600 volts.

25 3. The method of claim 1 wherein the color emitting phosphors are positively charged within a range of about 2 $\mu\text{C}/\text{gram}$ to about 10 $\mu\text{C}/\text{gram}$.

4. The method of claim 1 wherein the positive voltage is within a range of about
+ 200 volts to about + 600 volts.

30 5. The method of claim 1 wherein the color emitting phosphors are negatively charged within a range of about -2 $\mu\text{C}/\text{gram}$ to about -10 $\mu\text{C}/\text{gram}$.

6. A method of manufacturing a luminescent screen assembly on a faceplate panel of a color cathode-ray tube (CRT), comprising:

applying an organic conductive layer on the faceplate panel;

applying an organic photoconductive layer on the organic conductive

5 layer;

charging the organic photoconductive layer to a desired voltage,

thereby

giving the organic photoconductive layer a surface charge of one polarity;

sequentially discharging selected portions of the charged organic

10 photoconductive layer; and

affixing a color-emitting phosphor onto the organic photoconductive

layer

after each discharging step, wherein

for at least one charging, discharging, and affixing sequence, the

15 organic

photoconductive layer has a surface charge of one polarity and the corresponding color-emitting phosphor has a charge of the opposite polarity; and

for at least one other charging, discharging, and affixing sequence, the

organic

20 photoconductive layer has a surface charge of one polarity and the corresponding color-emitting phosphor has a charge of the same polarity.